

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Alice M. Chiang and Steven R. Broadstone
Application No.: 09/619,123 Group Art Unit: 3737
Filed: July 19, 2000 Examiner: Not Assigned
Title: PORTABLE ULTRASOUND IMAGING SYSTEM

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CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231	
on <u>1-16-01</u>	<u>Alice Chiang</u>
Date	Signature
<u>STEVEN R. BROADSTONE</u>	
Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references are enclosed.
- ☐ Copies of cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☒ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.

Concise Explanation Requirement (non-English references):

- ☒ The "concise explanation" requirement for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
- ☐ the explanation provided in the Specification.
- ☒ submission of the enclosed International Search Report.
- ☐ the enclosed English language abstract.
- ☐ Applicant requests that the following pending applications be considered:

Examiner's
Initials

____ U.S. Patent Application No. [], **Publication No.** [], **Publication Date** [],
by [inventor(s)], filed [], Docket No.: []

____ U.S. Patent Application No. [], **Publication No.** [], **Publication Date** [],
by [inventor(s)], filed [], Docket No.: []

____ U.S. Patent Application No. [], **Publication No.** [], **Publication Date** [],
by [inventor(s)], filed [], Docket No.: []

Examiner_____
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the application, including the current claims.]

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By


Thomas O. Hoover

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Lexington, Massachusetts 02421-4799

Dated:

January 16, 2001

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION January 15, 2001 (Use several sheets if necessary)				ATTORNEY DOCKET NO. 2008.1001-018		APPLICATION NO. 09/619,123	
				APPLICANT Alice M. Chiang and Steven R. Broadstone			
				FILING DATE July 19, 2000		GROUP 3737	
U.S. PATENT DOCUMENTS							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA	4,058,003	11-15-77	Macovski	73	609	
	AB	4,127,034	11-28-78	Lederman, et al.	73	626	
	AC	4,140,022	02-20-79	Maslak	73	626	
	AD	4,152,678	05-01-79	Shott, et al.	333	150	
	AE	4,170,766	10-09-79	Pridham, et al.	367	135	
	AF	4,173,007	10-30-79	McKeighen, et al.	367	11	
	AG	4,180,790	12-25-79	Thomas	367	7	
	AH	4,208,916	06-24-80	Thomenius, et al.	73	626	
	AI	4,213,195	07-15-80	Pridham	367	92	
	AJ	4,227,417	10-14-80	Glenn	73	625	
	AK	4,267,584	05-12-81	McKeighen, et al.	367	11	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
	AL	0 585 070 A1	02-MAR-94	EPO			
	AM	43 02 538 C1	07-APR-94	DE			X
	AN	0 627 635 A2	07-DEC-94	EPO			
	AO	2 219 089 A	29-NOV-89	United Kingdom			
	AP	42 41 712 A1	17-JUN-93	DE			X
	AQ	0 627 635 A2	07-DEC-94	EPO			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AR	Sasaki, K., et al. "A 7-ns 140 mW 1-Mb CMOS SRAM with Current Sense Amplifier," <i>IEEE Journal of Solid State Circuits</i> , 27(11):1511-1513, (November 1992).					
	AS	Scales, N.R. et al., "A programmable Multi-Channel CMOS Pulser Chip to Drive Ultrasonic Array Transducers," <i>IEEE Journal of Solid State Circuits</i> , 29(8):992-994, (August 1994).					
	AT	Hatfield, J.V. et al., "Transmit and Receive ASICs for An Ultrasound Imaging Multi-Element Array Transducer," pages 6/1-6/5, <i>IEEE</i> , (February 1994).					
EXAMINER				DATE CONSIDERED			

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 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA2	4,280,203	07-21-81	Gilmour	367	103	
	AB2	4,288,764	09-08-81	Ong	333	165	
	AC2	4,401,957	08-30-83	McKeighen, et al.	333	165	
	AD2	4,458,324	07-03-84	Burke, et al.	364	606	
	AE2	4,464,726	08-07-84	Chiang	364	606	
	AF2	4,542,653	09-24-85	Liu	73	626	
	AG2	4,632,124	12-30-86	Hiller, et al.	128	660	
	AH2	4,787,392	11-29-88	Saugeon	128	661.01	
	AI2	4,809,184	02-28-89	O'Donnell, et al.	364	413.25	
	AJ2	5,030,953	07-09-91	Chiang	341	172	
	AK2	5,063,541	11-05-91	Kondo, et al.	367	7	

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
	AL2						
	AM2						
	AN2						
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	AQ2						

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		

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U.S. PATENT DOCUMENTS							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA3	5,089,983	02-18-92	Chiang	364	844	
	AB3	5,123,415	06-23-92	Daigle	128	661.01	
	AC3	5,126,962	06-30-92	Chiang	364	725	
	AD3	5,249,578	10-05-93	Karp, et al.	128	661.01	
	AE3	5,269,307	12-14-93	Fife, et al.	128	661.01	
	AF3	5,287,753	02-22-94	Routh, et al.	73	861.25	
	AG3	5,345,426	09-06-94	Lipschutz	367	103	
	AH3	5,345,939	09-13-94	Engeler, et al.	128	661.01	
	AI3	5,365,929	11-22-94	Peterson	128	661.01	
	AJ3	5,381,795	01-17-95	Nordgren, et al.	128	663.01	
	AK3	5,386,830	02-07-95	Powers, et al.	128	661.09	

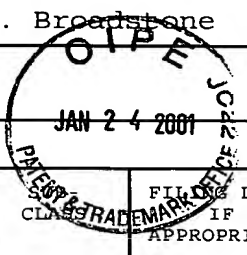
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	AL						
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U.S. PATENT DOCUMENTS							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	AA4	5,390,674	02-21-95	Robinson, et al.	128	660.07	
	AB4	5,396,285	03-07-95	Hedberg, et al.	348	163	
	AC4	5,402,793	04-04-95	Gruner, et al.	128	660.1	
	AD4	5,438,994	08-08-95	Starosta, et al.	128	661.01	
	AE4	5,450,851	09-19-95	Hancock	128	662.06	
	AF4	5,456,257	10-10-95	Johnson, et al.	128	662.02	
	AG4	5,462,057	10-31-95	Hunt, et al.	128	661.01	
	AH4	5,522,391	06-04-96	Beaudin, et al.	128	660.070	
	AI4	5,368,037	11-29-94	Eberle, et al.	128	662.06	
	AJ4	5,199,437	04-06-93	Langberg	128	662.06	
	AK4	5,435,313	07-25-95	Noda, et al.	128	662.03	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
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	AA5	5,203,335	04-20-93	Noujaim, et al.	128	661.01	
	AB5	5,257,629	11-02-93	Kitney, et al.	128	661.01	
	AC5	5,722,412	03-03-98	Pflugrath, et al.	128	662.03	
	AD5	5,295,485	03-22-94	Shinomura, et al.	128	660.07	
	AE5	5,483,963	01-16-96	Butler, et al.	128	661.01	
	AF5	5,528,302	06-18-96	Basoglu, et al.	348	442	
	AG5	5,690,114	11-25-97	Chiang, et al.	128	661.01	
	AH5	5,817,024	10-06-98	Ogle, et al.	600	447	
	AI5	5,839,442	11-24-98	Chiang, et al.	128	661.01	
	AJ5	5,964,709	10-12-99	Chiang et al.	600	447	
	AK5						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
	AL						
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